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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/716,041	11/17/2000	William N. Partlo	2000-0086-1	7625
75	90 06/11/2003			
John R Ross Cymer Inc			- EXAMINER	
Legal Department -MS/1-2A			NGUYEN, JOSEPH H	
16750 Via Del Campo Court San Diego, CA 92127-1712			ART UNIT	PAPER NUMBER
			2815	
			DATE MAILED: 06/11/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summary	09/716,041	PARTLO ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this	Joseph Nguyen	2815				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR RE THE MAILING DATE OF THIS COMMUNICATIO  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by state  - Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).  Status	N. R. 1.136(a). In no event, however, may a re- reply within the statutory minimum of thirty iod will apply and will expire SIX (6) MON tute cause the application to become AR	reply be timely filed  (30) days will be considered timely.  THS from the mailing date of this communication.				
1) Responsive to communication(s) filed on 26 March 2003.						
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3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>						
4)⊠ Claim(s) <u>1 and 4-17</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1 and 4-17</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>17 November 2000</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority docume	nts have been received.					
2. Certified copies of the priority docume	nts have been received in Ap	plication No				
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
<u></u>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) The translation of the foreign language provisional application has been received.						
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inf	mmary (PTO-413) Paper No(s) ormal Patent Application (PTO-152)				
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)  Office	Action Summary	Part of Paper No. 14				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 13, 15, 4-8 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Algots in view of Osamu (JP '437).

Regarding claim 1, Algots et al discloses on figure 2 a grating based line narrowing device for line narrowing a laser producing high energy laser beams, said device comprising a grating 16 defining a grating face, a chamber for housing at least said grating, a helium source (col. 9, lines 40-41) for providing a helium purge for purging said chamber, a beam expanding means 18 for expanding a beam from said laser to produce an expanded beam, a tuning means for directing said expanded beam onto the grating face in order to select from said expanded beam a desired range of wavelength. Algots does not disclose a purge gas manifold for directing helium purge gas across the grating face to remove said purge gas layer to reduce optical distortion caused by said hot purge gas layer. However, Osamu '374 discloses on figure 1 a purge gas manifold 40 for directing helium purge gas across the grating face to remove said purge gas layer to reduce optical distortion caused by said hot purge gas layer. In view of such teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Algots by having a purge gas manifold for directing helium purge gas across the grating face to

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remove said purge gas layer to reduce optical distortion caused by said hot purge gas layer for the purpose of reducing fluctuation of beam profile as taught by Osamu '374 (See Abstract).

Regarding claim 13, Algots et al discloses a feedback grating curvature control mechanism for providing active control of curvature of the grating face.

Regarding claim 15, Algots et al discloses a method of bandwidth control of a narrow band gas discharge laser having based line narrowing unit with grating 16 defining a grating face comprising the step of forcing a flow of gas across said grating face.

Regarding claims 4-8 and 14, Algots and Osamu '374 together disclose all the structure set forth in the claimed invention.

Claims 9-12, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Algots and Osamu ('374) as applied to claim 1 above, and further in view of Osamu (JP5-167172) et al.

Regarding claim 9, Algots and Osamu '374 disclose substantially all the structure set forth in the claimed invention except the helium purge gas flow being about 2 liters per minute. However, Osamu '172 et al discloses the helium purge gas flow is about 2 liters per minute. In view of such teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Algots and Osamu ('374) by having the helium purge gas flow being about 2 liters per minute for the purpose of effectively cooling off the heat generated in the grating.

Regarding claims 10-12, 16-17, Algots and Osamu '374 and Osamu '172 together discloses all the structure set fort in the claimed invention.

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## Response to Arguments

Applicant's arguments presented in the amendment filed on 3/26/2003 have been fully considered but are not persuasive since applicant has not pointed out any structural differences between the claimed of the instant application and the combination of Algots and Osamu '374, and Algots and Osamu'374 and Osamu'172. Further, the Examiner reiterates his position that a reference is good for everything it teaches. Still further, it is not clear where Osamu'374 or Osamu'172 states "must be avoided" with respect to gas purging, nevertheless, this statement does not make either references improper under 35 U.S.C 102(b)/103(a). Lastly, such argument related to "must be avoided" and speculation as to why the reference was abandoned without pointing out structural differences cannot and will not serve to further the prosecution of the instant applicant,

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Nguyen whose telephone number is (703) 308-1269. The examiner can normally be reached on Monday-Friday, 7:30 am- 4:30 pm

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (703) 308-1690. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 308-7382 for regular communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JN June 9, 2003

> EDDIE LEE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800